ARKANSAS INBRE

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Telemedicine collaboration improves perinatal regionalization and lowers statewide infant mortality *[edited abstract]*

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The Center for Translational Neuroscience Center of Biomedical Research Excellence (COBRE) Core Facility, located within the University of Arkansas, runs the Pediatric Physician Learning and Collaborative Education (PedsPLACE) program and Telenursery. Peds PLACE involves a weekly educational teleconference in real-time, followed by a consultation hour, across up to 25 neonatal intensive care units or delivery facilities that account for >95% of all births in the state (total ~40,000 per year). Telenursery is the research arm of PedsPLACE that seeks to decrease mortality, especially among low birth weight babies.

Kim, Teague-Ross, Greenfield, William, Kuo and Hall assessed a telemedicine (TM) network's, like Telenursery, effects on decreasing deliveries of very low birth weight (VLBW) in hospitals without Neonatal Intensive Care Units (NICUs) and statewide infant mortality. A VLBW is considered to be at or less than 1500 grams at the time of delivery.

Deliveries of VLBW neonates in targeted hospitals decreased from 13.1 to 7.0 percent. The deliveries of VLBW neonates in non-targeted hospitals were unchanged. Mortality rates also decreased in targeted hospitals from 13.0 to 6.7 percent after TM intervention. TM decreased deliveries of VLBW neonates in hospitals without NICUs and was associated with decreased statewide infant mortality.

"SINCE THE START OF PEDSPLACE IN 2006, THE MORTAILITY RATE IN LIVE BIRTHS HAS DECREASED FROM 8.5 TO 7 PER EVERY 1,000 DELIVERIES...

...THIS AMOUNTS TO SAVING ROUGHLY 60 BABIES PER YEAR, EVERY YEAR, FROM NOW ON."

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